



NPC



NPC Series

VALVE REGULATED LEAD-ACID BATTERIES
CYCLIC APPLICATION

NPC

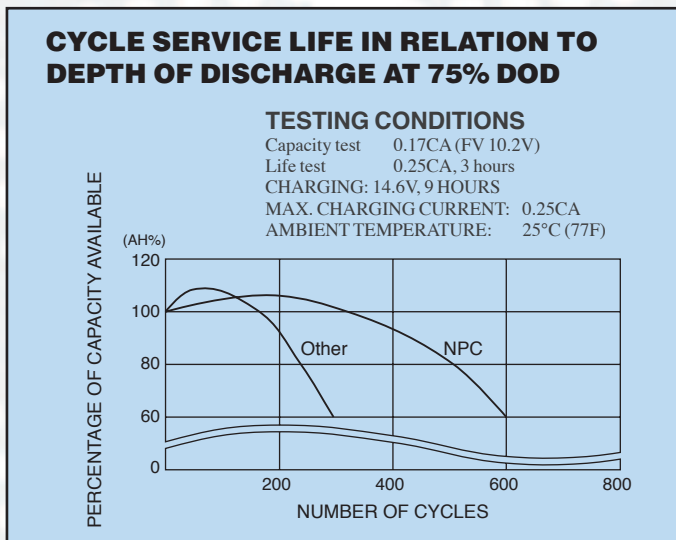
YUASA NPC SERIES

The low maintenance and valve regulated constructions combine with heavy-duty plates and unique separator systems to make NPC service twice as long as conventional counterparts.

FEATURES

1. Double cycle life

NPC operates 500 charge/discharge cycles or twice as many cycles as conventional cycle use batteries at 75%D.O.D. (depth of discharge).



2. Valve-regulated and maintenance-free

Battery electrolyte retained solidly in the separator and the innovative gas recombinant system allows minimum gas emittance freeing the user from maintenance.

3. Durability for deep discharge use

Yuasa's state-of-the-art plate barrier prevention and the unique separator systems help endure deep discharge use thus considerably prolonging battery's service life.

4. Minimal self-discharge

Cyclic use batteries tend to be left discharged after usage causing plate corrosion leading to shortened life. Self discharge rate of NPC is as small as only 0.1% a day at 20°C and thus extends the storage period allowed.

Operating temperature range

Charge:	- 15 ~ 50°C	(5 ~ 122°F)
Discharge:	- 15 ~ 50°C	(5 ~ 122°F)
Storage:	- 20 ~ 50°C	(- 4 ~ 122°F)

Recommended charging method

Current:	Max. 0.25CA
Voltage:	2.4 ~ 2.5VPC

Applications

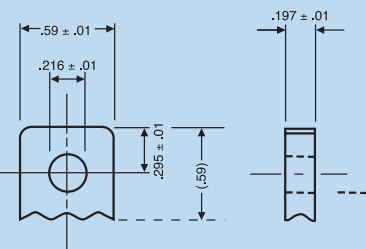
- Wheelchairs
- Golf trolley
- Lawn mowers
- Lights
- Toy cars
- Sprayers
- Photovoltaics
- Robots
- Communications
- Electric tools
- Pumps
- Measuring instruments
- AGV (Automatic guided vehicle)
- Magnetic lifts

Specifications

NPC Model	Volts	Rated Capacity (20 hr rate) (Ah)	Approx. Dimensions			Weight	Layout	Terminals
			Length	Width	Overall height incl. terminals			
NPC17 - 12	12	17	181mm	76mm	167mm	6.2kg	2	E
NPC24 - 12I	12	24	175mm	166mm	125mm	8.8kg	2	J
NPC30 - 12	12	30	195mm	129mm	179mm	11.25kg	1	F
NPC38 - 12I	12	38	197mm	165mm	170mm	14kg	2	J
NPC65 - 12I	12	65	350mm	166mm	174mm	23kg	2	K

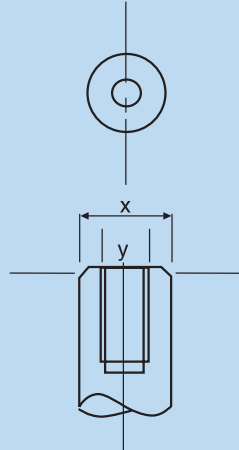
Terminals

Bolt fastened terminal F



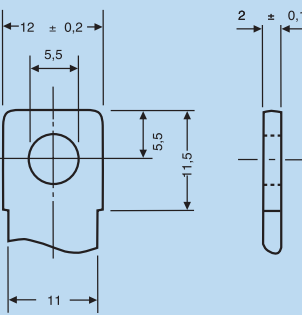
INCH = MM	
.59	15.0
.216	5.5
.295	7.5
.197	5.0

Terminals J, K & L



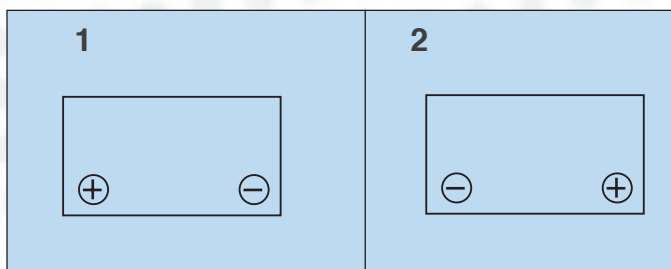
Terminal	x	y
J:	17mm	M5
K:	20mm	M6
L:	20mm	M8

Bolt fastened terminal E



INCH = MM	
.472	12.00
.453	11.50
.433	11.00
.216	5.50
.079	2.00

Layouts



CAUTION

- Avoid short circuit.
- Do not charge in a sealed container.
- Service life and operational characteristics will be affected by temperature.
- AC Ripple reduces service life.

WARNING!

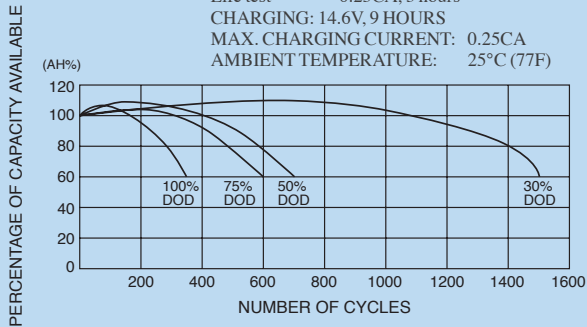
The battery type NPC65-12I must never be installed permanently suspended by their handles; they are not designed for this purpose.

Performance

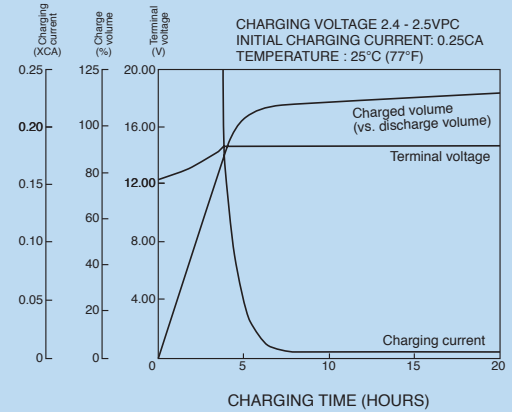
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

TESTING CONDITIONS

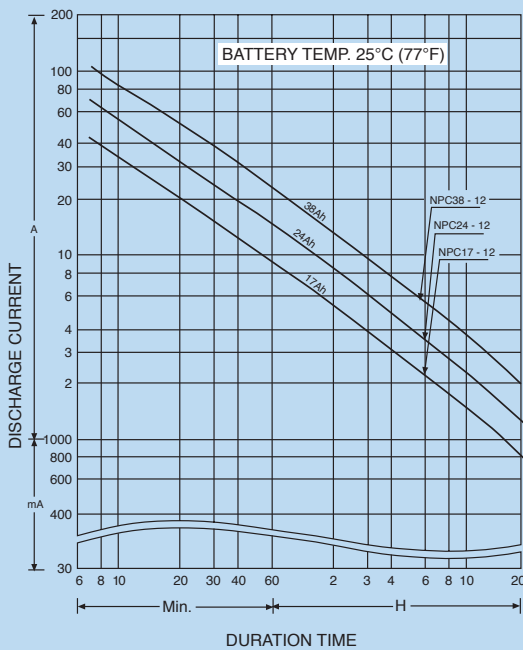
Capacity test 0.17CA (FV 10.2V)
 Life test 0.25CA, 3 hours
 CHARGING: 14.6V, 9 HOURS
 MAX. CHARGING CURRENT: 0.25CA
 AMBIENT TEMPERATURE: 25°C (77°F)



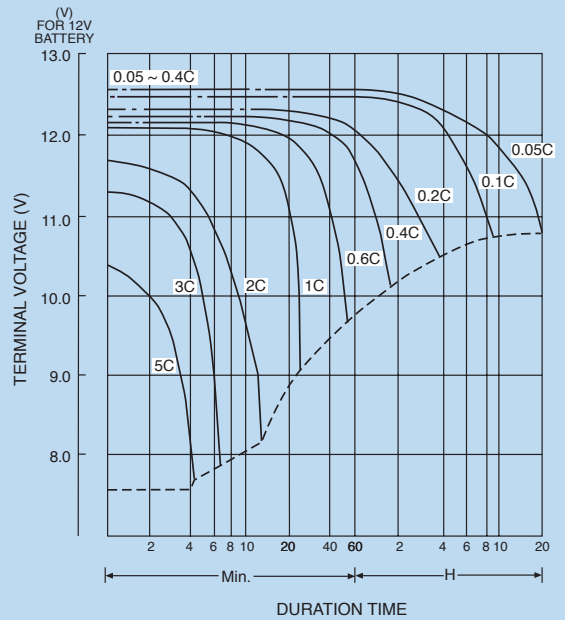
CONSTANT CURRENT, CONSTANT VOLTAGE CHARGING CHARACTERISTICS



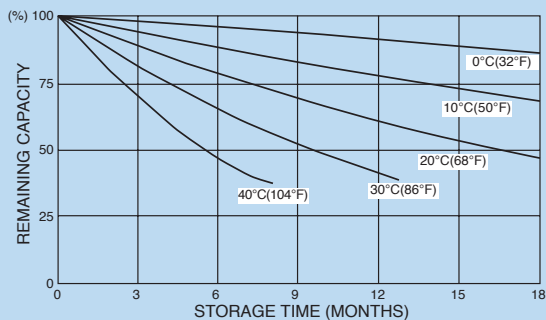
DISCHARGE CURRENT VS. DURATION TIME



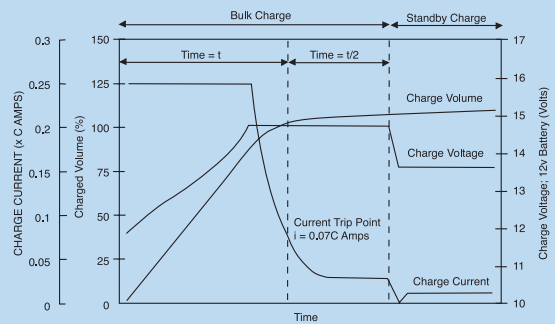
DISCHARGE CHARACTERISTICS AT VARIOUS CURRENTS (25°C (77°F))



SELF DISCHARGE CHARACTERISTICS



CYCLIC RECHARGE REGIME



Yuasa Battery Sales (UK) Ltd

Unit 22 Rassau Industrial Estate
 Ebbw Vale, Gwent, NP23 5SD
 Tel: 08708 500312 Fax: 08708 500317
 E-mail: enquiries@yuasa-sales.co.uk

Registered number 1548820

Cat. No. NPCSF April 06

E.O.E.

Distributed by